

Inequality in Quality

Addressing Socioeconomic, Racial, and Ethnic Disparities in Health Care

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TWO NATIONAL EFFORTS TO improve health care, the elimination of racial and ethnic disparities in health care,¹ and health care quality improvements² represent inseparable components of high-quality care. Greater integration between these initiatives could enhance progress toward ensuring quality in health care for all regardless of socioeconomic position and race/ethnicity. In this article, we briefly review socioeconomic and racial/ethnic disparities in health care quality. We show that despite the challenge these disparities pose to organizational quality improvement, disparities are not recognized by existing performance assessment. To remedy this problem, we propose 5 principles for addressing disparities in health care quality, illustrate the benefits of this approach, and address challenges to implementation.

DISPARITIES IN HEALTH CARE QUALITY

Because race/ethnicity and socioeconomic position in the United States are so closely intertwined, it is difficult to isolate racial/ethnic disparities in health care due to socioeconomic disparities.³ However, socioeconomic position appears to be the more powerful determi-

Socioeconomic and racial/ethnic disparities in health care quality have been extensively documented. Recently, the elimination of disparities in health care has become the focus of a national initiative. Yet, there is little effort to monitor and address disparities in health care through organizational quality improvement. After reviewing literature on disparities in health care, we discuss the limitations in existing quality assessment for identifying and addressing these disparities. We propose 5 principles to address these disparities through modifications in quality performance measures: disparities represent a significant quality problem; current data collection efforts are inadequate to identify and address disparities; clinical performance measures should be stratified by race/ethnicity and socioeconomic position for public reporting; population-wide monitoring should incorporate adjustment for race/ethnicity and socioeconomic position; and strategies to adjust payment for race/ethnicity and socioeconomic position should be considered to reflect the known effects of both on morbidity.

JAMA. 2000;283:2579-2584

www.jama.com

nant of primary health care use in the United States.⁴⁻⁷ Acting through the agents of poorer housing and nutrition, lower educational and economic opportunity, and greater environmental risks, both lower socioeconomic position and minority race/ethnicity are associated with poorer health and shortened survival.^{8,9} Socioeconomic and racial/ethnic disparities in the process and delivery of health care contribute to these disparities in health outcomes.¹⁰

In the United States, lower socioeconomic position is associated with lower overall health care use, even among those with health insurance.¹¹⁻¹⁴ Socioeconomic position, as measured by education or income, is also clearly related to standard measures of health care quality. Lower socioeconomic position is associated with receiving fewer

Papanicolaou tests,^{15,16} mammograms,^{15,16} childhood¹³ and influenza immunizations,¹⁷ and diabetic eye examinations,¹⁸ later enrollment in prenatal care,¹⁹ and lower quality ambulatory²⁰ and hospital care.²¹ Similarly, being a member of a minority racial/ethnic group appears to be a risk factor for less intensive, if not lower quality, care.²² Elderly blacks, compared

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Policy Perspectives Section Editors: Robert J. Blendon, ScD, Harvard School of Public Health, Boston, Mass; Drummond Rennie, MD, Deputy Editor, *JAMA*.

with whites, are seen less often by specialists,^{23,24} receive less appropriate preventive care including mammography and influenza vaccinations,¹⁷ lower-quality hospital care,²¹ and fewer expensive, technological procedures.²⁵ In general, blacks receive less intensive hospital care,^{26,27} including fewer cardiovascular procedures,²⁸⁻³³ lung resections for cancer,³⁴ kidney and bone marrow transplants,^{35,36} cesarean sections,³⁷ peripheral vascular procedures,³⁸ and orthopedic procedures.³⁹ They have also been reported to receive less aggressive treatment of prostate cancer,⁴⁰ fewer antiretrovirals for human immunodeficiency virus infection,⁴¹ antidepressants for depression,⁴² tympanostomy tubes,⁴³ and admissions for chest pain,⁴⁴ and lower-quality prenatal care.⁴⁵

Although health care disparities in other ethnic minorities have received considerably less attention, available evidence suggest that Latino and Asian Americans are also affected. Compared with whites, Latinas receive fewer mammograms, Papanicolaou tests, and influenza vaccinations,⁴⁶ less prenatal care,⁴⁶ fewer cardiovascular procedures,⁴⁷ and less analgesia for metastatic cancer⁴⁸ and trauma.⁴⁹ Asian Americans receive fewer Papanicolaou tests and influenza vaccinations.⁴⁶ Native Americans receive less prenatal care.⁴⁶

Not surprisingly, disparities in health care use and process are associated with disparities in outcomes. Ethnic minorities report lower health care satisfaction and greater discrimination.⁵⁰ Socioeconomic position and race/ethnicity is associated with potentially avoidable procedures,^{17,51} including amputations⁵² and orchiectomies,⁵³ treatment of late-stage cancer,⁵⁴⁻⁵⁶ avoidable hospitalizations,⁵⁷⁻⁶⁰ hospital readmissions,⁶¹ and untreated disease.⁶² Low-birth weight and health status of senior citizen are also associated with lower socioeconomic position and minority race/ethnicity.^{63,64}

The pathways through which socioeconomic position and race/ethnicity affect health care are complex. They likely include health care affordability,¹⁵ geographic access,^{65,66} transportation,⁶⁵ edu-

cation,^{15,67} knowledge,⁶⁸ literacy,⁶⁹ health beliefs,^{55,70} racial concordance between physician and patient,⁷¹ patient attitudes¹¹ and preferences,^{72,73} competing demands including work⁷⁴ and child care,⁷⁴ and provider bias.^{75,76} The significance of any factor is likely to vary by patient and physician.

Although racial/ethnic and socioeconomic disparities in health care have been extensively documented by health care researchers, the isolation of disparities due to mainstream quality assurance has impeded progress in addressing them. The emergence of managed care as the dominant health-care delivery system in the United States,⁷⁷ and the growing interest on the part of public and private purchasers of health care for accountability through accreditation and disclosure of performance, offer an unprecedented opportunity to move from continued documentation of the problem to potential solutions.

DISPARITIES NOT RECOGNIZED BY EXISTING QUALITY IMPROVEMENT

Although many of the limitations of existing quality assessment have been described,^{78,79} there has been little discussion of the failure of existing measures to identify socioeconomic and racial/ethnic disparities in quality. Yet, these disparities in health care delivery and process constitute a fundamental threat to quality. The notion of health care quality implies that resources are allocated according to medical need, risk, and benefit. Allocation based on alternative standards is inconsistent with quality. Under existing quality assessment, health maintenance organizations (HMOs) may inadvertently engage in reverse targeting⁸⁰ (ie, allocation of resources to those at lowest risk, and nonetheless receive favorable Health Plan Employer Data and Information Set [HEDIS] ratings). For example, HMOs can exceed the benchmark for hepatitis B by immunizing large numbers of children at lowest risk, while achieving suboptimal levels for children at highest risk. Thus, considerable intraplan variation in care deliv-

ery can be masked because existing quality measures are too crude to capture critical disparities.

In addition, current performance measures fail to account for the impact of the socioeconomic and racial/ethnic composition of members on plan performance. Under current National Committee for Quality Assurance (NCQA) reporting requirements, childhood immunizations or low-birth-weight rates from HMOs with affluent members may be compared with those from a plan predominated by working-poor members. Recent studies suggest that lower socioeconomic position adversely affects performance ratings.⁸¹⁻⁸⁴ Unmonitored, this bias in performance reporting could create an incentive for health care organizations to boost ratings through selective enrollment of low-risk members.⁷⁹

Variations in health care organizational process (for those processes in which optimal performance is unambiguous) compromise quality.⁸⁵ According to Donabedian,⁸⁶ consistency in process represents 1 of the 7 pillars of health care quality. The concept of variation as a challenge to quality is acknowledged by the Health Care Financing Administration (HCFA) through its health care quality improvement program.⁸⁷ However, under existing quality assurance, a hospital can achieve acclaim for the success of its cardiac surgery program, yet escape notice for providing reduced access to effective treatments for minorities. The concept of organizational consistency suggests that socioeconomic and racial/ethnic variations in care represent legitimate targets for quality improvement efforts. In some instances, such variations represent underuse among members of vulnerable groups. In others, they represent excess or inappropriate use among more affluent or white members. In either instance, disparities signal an area potentially ripe for quality improvement.

FIVE PRINCIPLES FOR ADDRESSING DISPARITIES

To promote dialogue on addressing disparities in health care among physicians, health care organizations, insur-

ers, government, accreditation agencies, minority groups, and consumers, we propose the following 5 principles. First, disparities must be recognized as a significant quality problem. The allocation of services on the basis of factors other than medical need or risk creates a critical challenge to quality in addition to raising questions of distributive justice.⁸⁸

Second, consistent with previous recommendations including those from a presidential commission,^{2,89,90} the collection of relevant and reliable data are needed to address disparities. Concerned groups would need to agree on the nature, form, and mode of collection of the data. Support for this step is slowly developing. A recently published NCQA-commissioned report recommends that managed care organizations (MCOs) include nonclinical determinants of outcomes, including socioeconomic and racial/ethnic data, as part of the core information on patients.⁷⁸ In addition, the Department of Health and Human Services recently adopted a policy requiring all data collection and reporting systems that it sponsors to include racial-ethnic categories.

Third, beginning with existing quality measures such as HEDIS, performance measures should be stratified by socioeconomic position and race/ethnicity. For example, instead of simply reporting overall rates of Papanicolaou test screening among eligible women, MCOs should also report separate rates by socioeconomic position and race/ethnicity. This stratification would ensure accountability for care provided to women who are at highest risk for cervical dysplasia and for going unscreened. New measures will be needed when existing indicators are not adequate, for example, access to highly technological procedures such as cardiovascular procedures, transplantation, and cancer treatment. Possible indicators include the ratios of the number of renal transplants to patients started on dialysis, cardiovascular procedures performed per myocardial infarction, and potentially curative oncological surgery/palliative surgery, stratified by race/ethnicity and

socioeconomic position. The NCQA and the Joint Commission on Accreditation of Healthcare Organizations can play vital roles by requiring the inclusion of socioeconomic position and/or race/ethnicity in performance reports.

Fourth, because the socioeconomic position and race/ethnicity of enrollees affect existing performance measures, population-wide performance measures should be adjusted for socioeconomic position and race/ethnicity. Adjustment would facilitate more meaningful comparisons among health care organizations as discussed in the NCQA commissioned report.⁷⁸ This step should not be undertaken until appropriate measures for monitoring care to vulnerable groups have been fully implemented to avoid institutionalizing substandard care.

Fifth, an approach to disparities should account for the relationships between both socioeconomic position and race/ethnicity and morbidity. Consideration should be given to linking reimbursement to the socioeconomic position and racial/ethnic composition of the enrolled population.⁹¹ For example, in Great Britain, more deprived areas receive higher reimbursement rates based on higher need.⁹² HCFA recently announced plans to base Medicare rates on case-mix adjustment.⁹³ This approach should be extended to include socioeconomic and racial/ethnic adjustment. Such adjustment would compensate plans for enrolling patients with greater morbidity, not fully captured by case-mix adjustment,⁸⁴ and help offset the costs of quality improvement efforts designed to eliminate disparities.

BENEFITS OF THE PROPOSALS

Our proposals would bring health care disparities into mainstream quality assurance. In doing so, reducing disparities would become a legitimate focus for quality improvement. Health care organizations could use continuous quality improvement to identify and address disparities in care by socioeconomic position or race/ethnicity. National data regarding disparities in disease incidence

and severity can help this process. For example, the prevalence of hepatitis B is 8 times higher among older black men than among older white men.⁹⁴ This finding should prompt HMOs to examine hepatitis B immunization status by race among enrollees and develop strategies designed to boost immunization rates among black children and adolescents. Examples of successful strategies proven to boost immunization rates among at-risk groups include telephone and mail reminders,⁹⁵ case management,⁹⁶ and use of voucher incentives.⁹⁷ Similar strategies have been shown to improve mammography rates among low-income women.^{98,99} Alternative approaches might be used to reduce rates of smoking, which are inversely related to socioeconomic position.^{100,101}

In addition, these proposals would make health care organizations accountable to purchasers, accreditation agencies, and consumers for addressing disparities among their members. Use of socioeconomic, racial/ethnic-specific performance measures in HEDIS, and other sets of quality indicators would promote accountability for the quality of care provided to at-risk groups. Such a step would have implications for reducing socioeconomic and racial/ethnic disparities in health care and improving quality. For example, health care organizations that continue to provide suboptimal care to members of at-risk groups might lose accreditation by the NCQA or the Joint Commission on Accreditation of Healthcare Organizations. Publication of performance reports might influence consumer selection of an MCO or hospital.¹⁰² Finally, the proposals would provide crucial information to public purchasers representing at-risk populations that could be used to reinforce policy objectives.

CHALLENGES TO IMPLEMENTATION

There are a number of challenges to implementing these proposals. These include leadership, absence of relevant data, privacy and data collection concerns, misuse of data, and organizational inertia and resistance.

Leadership

Obtaining commitments from key players to these proposals will be challenging. The development of current performance measures has been driven by public and private sector purchasers' demands. It is unlikely that disparities in health care delivery will be addressed as a critical component of quality improvement without the active engagement of these purchasers. However, private sector purchasers have an interest in ensuring that all employees receive high-quality care independent of race/ethnicity or socioeconomic position. States have a similar interest for Medicaid beneficiaries. Community leaders' and consumer advocates' interests are also critical. A recent survey conducted by the Kaiser Family Foundation found that members of racial/ethnic minority groups are significantly more likely than whites to perceive that the quality of care they receive may be influenced by their own race/ethnicity,⁵⁰ but discussions of disparities are not often prominent in consumer publications about quality. A promising development is HCFA's recent focus on disadvantaged populations through peer review organizations (John Hebb, PhD, oral communication, February 14, 2000). Finally, medical and other health professions have a critical opportunity to demonstrate leadership as they struggle to respond to increased demands for accountability.

Absence of Relevant Demographic Data

Quality improvement efforts directed at the identification and elimination of disparities cannot proceed without relevant data. Most managed care plans do not collect socioeconomic data or racial/ethnic data on their plan members.¹⁰³ Many, but not all, hospitals, collect race/ethnicity data, but the quality of the data is variable.²⁶ Absence of reliable socioeconomic and race/ethnicity data is a major stumbling block to improved accountability to accrediting organizations, such as the NCQA, which accredits MCOs, and the Joint Commission on Accreditation of Healthcare Organiza-

tions, which accredits hospitals and other health care facilities.

Appropriate and confidential data collection procedures that use valid and reliable measures are needed. The choice and number of socioeconomic and/or racial/ethnic categories, assignment of persons of multiracial background and nonresponders, and sampling method are significant challenges. We believe that these issues can be best resolved through further discussion and study once the key principles have been established.

Privacy and Data Collection Concerns

There are few indicators of public attitudes to requests by health care organizations for socioeconomic and racial/ethnic data. A project supported by the Commonwealth Fund to develop a minority health care report card includes 2 expert panels of community leaders (1 black and 1 Hispanic). The panels expressed support for the idea of collection of information on race/ethnicity by health plans if the information was not collected before enrollment (David Nerenz, PhD, oral communication, June 7, 1999).

Although public response to collection of these data is not clear, potential privacy concerns might be mitigated through use of less personal measures and less intrusive data collection procedures. Managed care organizations could use less confidential measures of socioeconomic position such as years of education instead of family income. Another approach involves the use of patient addresses as proxies for potential socioeconomic and racial/ethnic disparities. Software programs allow the matching of addresses to census block groups and census data from those areas can be used as surrogate measures of potential disparities.^{104,105} Many hospitals currently obtain racial/ethnic data on their patients, but they need to adopt standardized data collection procedures. Public input to discussions regarding the tension between the right to privacy and equity in health care are es-

sential to ensure that the former is not jeopardized in efforts to ensure the latter. The costs of the additional data collection and stratification should not be underestimated. If these costs are not explicitly recognized by purchasers and consumers, health care organizations may be reluctant to incur the costs of implementing these proposals.

Misuse of Data

In theory, MCOs could use socioeconomic or racial/ethnicity data to selectively enroll or disenroll patients. This risk would be minimized by making data accessible only after enrollment. More importantly, accreditation organizations, purchasers, and regulators could use socioeconomic and race/ethnicity data to monitor enrollment and disenrollment patterns over time. High rates of disenrollment by a vulnerable group would suggest the need for further evaluation. Thus, formal use of these data should minimize the already present risk for misuse.

Health Care Organizational Inertia and Resistance

Interest on the part of health care providers and organizations would be fostered through a variety of tools including: education of physicians, purchasers, and HMO industry leaders; changes in HEDIS reporting requirements; and changes in HCFA policy, particularly reimbursement. Administrators and physicians associated with HMOs should be informed about the impact of socioeconomic and racial/ethnic factors on health care and health outcomes. For example, low socioeconomic position and smoking are equally important risk factors for mortality,⁸ yet socioeconomic position is infrequently considered in clinical decision making.¹⁰⁶ Furthermore, socioeconomic disparities in health care and health are not confined to the indigent or patients on Medicaid but span the entire socioeconomic spectrum,^{8,9,11,107} and are observed among persons with private insurance.¹¹ Improved accountability and publication of disparities may stimulate the development of targeted orga-

nizational initiatives. Clinicians, confronted with disparities in their own practice, may work to reduce these variations.^{108,109}

CONCLUSIONS

The recognition of disparities in health care as a quality issue has far-reaching implications for reducing socioeconomic and racial/ethnic disparities in health care. Disparities in health care are not immutable. Racial disparities in use of cardiovascular procedures differ widely by region of the country.⁹⁹ Among New York City hospitals, there are no racial disparities for necessary cardiac procedures.¹¹⁰ Racial differences in breast cancer survival were eliminated when mammography promotion was extended to all women enrolled in the Health Insurance Plan of Greater New York mammography screening study.¹¹¹ Similarly, socioeconomic disparities in mortality due to hypertension were eliminated in the Hypertension Detection and Follow-up Program in which all participants were provided comparable levels of care.¹¹² In New York State, several Medicaid HMOs meet or exceed the overall state averages for quality indicators despite providing care to poor and largely minority members.¹¹³

Health care alone cannot be expected to eliminate socioeconomic and racial/ethnic disparities in health outcomes,^{67,114} though it undoubtedly plays an important role.¹⁰ Although these proposals primarily target those with health insurance, they do provide an approach for improving health care for all Americans. By linking health care quality to the absence of disparities in health care, these proposals can help achieve the national objective of eliminating racial/ethnic disparities in health overall.

Funding/Support: The work was supported by grant R0109963-01 from the Agency for Health Care Policy and Research.

Disclaimer: The views expressed in this article represent those of the authors and not necessarily those of the authors' affiliated institutions and do not represent official policy of the Agency for Healthcare Research and Quality or the US Department of Health and Human Services.

Acknowledgment: We thank John M. Eisenberg, MD, for his thoughtful comments on earlier versions of the manuscript and Nancy Phillips for her editorial assistance.

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